TESS(NC) METOC DATABASE MANAGER (MDBMAN) SOFTWARE USER'S MANUAL (SUM) VERSION 1.2

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FOREWORD

This document will be reviewed and updated by the Naval Research Laboratory as required to maintain currency. Comments and recommendations for changes may be forwarded for review and incorporation to:

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1 OVERVIEW

1.1 TESS(NC) Overview

This Software User's Manual (SUM) describes the user interface of the Meteorology and Oceanography (METOC) Database Manager (MDBMAN) segment, Version 1.2 series, of the Tactical Environmental Support System Next Century [TESS(NC)] METOC Database.

The software described in this document forms a portion of the METOC Database component of the TESS(NC) Program (Navy Integrated Tactical Environmental Subsystem (NITES) Version I). On 29 October 1996, the Oceanographer of the Navy issued a TESS Program Policy statement in letter 3140 Serial 961/6U570953, modifying the Program by calling for five seamless software versions that are Defense Information Infrastructure (DII) Common Operating Environment (COE) compliant, preferably to level 5.

The five versions are:

•	NITES Version I	The local	data	fusion	center	and	principal	METOC
		analysis and forecast system (TESS(N				S(NC)		

- NITES Version II The subsystem on the Joint Maritime Command Information System (JMCIS) or Global Command and Control System (GCCS) (NITES/Joint METOC Segment (JMS))
- NITES Version III The unclassified aviation forecast, briefing, and display subsystem tailored to Naval METOC shore activities (currently satisfied by the Meteorological Integrated Data Display System (MIDDS))
- NITES Version IV The Portable subsystem composed of independent PCs/workstations and modules for forecaster, satellite, communications, and Integrated Command, Control, Communications, Computer, and Intelligence Surveillance Reconnaissance (IC4ISR) functions (currently the Interim Mobile Oceanographic Support System (IMOSS))
- NITES Version V Foreign Military Sales (currently satisfied by the Allied Environmental Support System (AESS))

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NITES I acquires and assimilates various METOC data for use by US Navy and Marine Corps weather forecasters and tactical planners. NITES I provides these users with METOC data, products, and applications necessary to support the warfighter in tactical operations and decision making. NITES I provides METOC data and products to NITES I and II applications, as well as non-TESS(NC) systems requiring METOC data, in a heterogeneous, networked computing environment.

The TESS(NC) Concept of Operations and system architecture require that the METOC Database be distributed both in terms of application access to METOC data and products and in terms of physical location of the data repositories. The organizational structure of the database is influenced by these requirements, and the components of this distributed database are described below.

In accordance with DII COE database concepts, the METOC Database is composed of six DII COE-compliant *shared database* segments. Associated with each shared database segment is an Application Program Interface (API) segment. MDBMAN interfaces with both the API and Database segments on the client/server platform as follows:

Data Type	Data Segment	API Segment
Grid Fields	MDGRID	MAGRID
Latitude-Longitude-Time (LLT)	MDLLT	MALLT
Observations		
Textual Observations and Bulletins	MDTXT	MATXT
Remotely Sensed Data	MDREM	MAREM
Imagery	MDIMG	MAIMG
Climatology Data	MDCLIM	MACLIM

A typical client-server installation is depicted in Figure 1-1. This shows the shared database segments residing on a DII COE database server, with a NITES I or II client machine hosting the API segments. The MDBMAN segment will interface directly with the server platform. Communication between API segments and shared database segments is accomplished over the network using ANSI-standard Structured Query Language (SQL).

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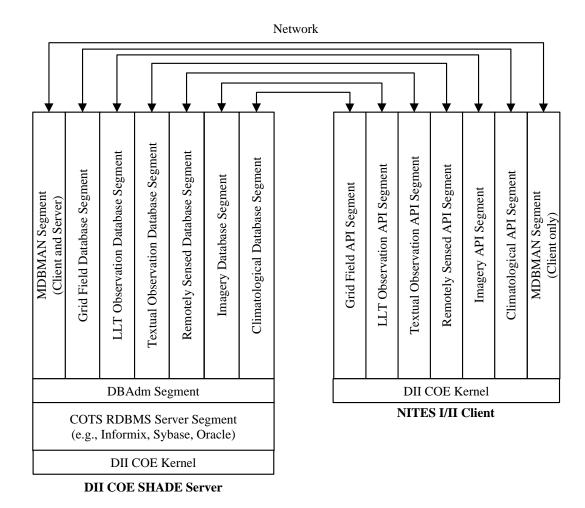


Figure 1-1. TESS(NC) METOC Database Conceptual Organization

The MDBMAN segment interfaces directly with the API and database segments provided on the database server machine. The MDBMAN windows and screens provide easy operation for the user to purge and archive various types of METOC data from the database and retrieve data that have been previously archived to a tape or other media. This interface is easily accessible through logging in as DBAdmin on the TAC-3/TAC-4 Systems, or through the Program's menu on the PC Windows NT/4.0 system.

1.2 MDBMAN Overview

The MDBMAN segment provides the ability to purge and archive various types of METOC data from the database. In addition, the segment allows for METOC data to be archived to a tape or hard disk, and to be retrieved and restored into the

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database. This software is designed to run under the DII COE, release 3.1, on a Hewlett-Packard computer running HP-UX 10.20 or a personal computer running the Microsoft Windows NT 4.0 operating system with Service Pack 3.

1.3 Document Overview

This SUM documents the operational procedures for software execution of the MDBMAN Segment.

The remainder of this document contains the following sections:

- Section 2, Referenced Documents, lists those documents, books, and other source material consulted in the preparation of this document as well as those referred to directly in this document.
- Section 3, Screen Flow, contains descriptions of the screen flow functionality and software execution procedures for the MDBMAN.
- Appendix A, Abbreviations/Acronyms, defines the abbreviations and acronyms used in this document.

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2 REFERENCED DOCUMENTS

None.

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3 SCREEN FLOW

3.1 User Interface Conventions

3.1.1 Menu Mnemonics

For all window menus in the MDBMAN program, menu mnemonics are indicated by an underline within a menu or menu selection name (e.g., <u>File</u> infers that the keystrokes <ALT><F> would have the same effect as pointing to "File" and selecting it with the use of a pointing device). This will display the pull down menu. To select from the menu, type the character that is underlined in the option to be selected.

3.2 METOC Database Manager Window

When MDBMAN is executed, the operator will receive an MDBMAN information window with the message "METOC Database Manager," followed by the version number of MDBMAN. After the MDBMAN information window disappears, the MDBMAN Window will appear (Figure 3-1), followed by an additional working window. The working window dialog box contains the message "Connecting to MDBMAN Server...." If no MDBMAN server is found, a different dialog box will appear informing the user that "The server is not responding." If this dialog box appears, select the **DISMISS** button at the bottom of the window, then proceed to the **File** menu and **Server Config** (Section 3.7). This allows the user to set up MDBMAN to the desired server.

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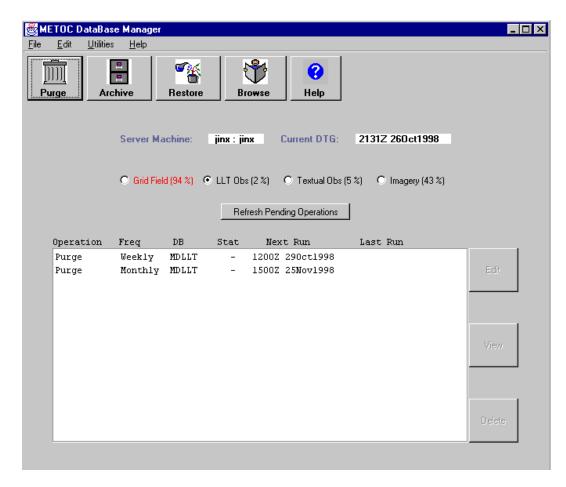


Figure 3-1. METOC Database Manager Window

The METOC Database Manager Window contains the following information:

- The title bar contains the following pull down menus: File, Edit, Utilities, and Help.
- A row of push button icons located below the pull down menus provides a
 quick method to access some of the functionality of the pull down menus.
 The icons are: Purge, Archive, Restore, Browse, and Help.
- An informational field below the row of icons displays the server that the operator is currently connected to. It also displays the current date and time (the time is in Zulu (Z)). The time and date are displayed in the following format: hhmmZ ddmmmyyyy (e.g., 1600Z 30Jun1999).
- The four databases that can be manipulated with MDBMAN are displayed.
 They are Grid Field, LLT Obs, Textual Obs, and Imagery. The percent field
 next to the database is the percentage of space used in that database. If all of
 the databases are under intensified, this usually means that the Informix server

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is not running. The procedure for starting the Informix server is contained in the MDBMAN Installation Procedures (Section 4.1.3 – start at Step 4 and log on as DBAdmin).

 A display of the "Pending Operations" is located in the lower half of the window. In this display, a list is shown of any and/or all operations that are going to be executed, and the time they are scheduled to be executed. If the "Pending Operations" push button is selected, it will update the scheduled operations list.

3.2.1 File Menu

The **File** menu contains the options to manipulate the data residing in the selected database. The operator also has the ability to view the contents of the databases. The options located in the **File** menu are:

Purge

This option removes data from a preselected database to the criteria that are defined in the purge window. The purge can be executed immediately or scheduled for a future time. In addition, there is an associated icon for this function, located on the METOC Database Manager Window (Section 3.4).

Archive

This option saves selected data from a preselected database to a tape drive or any other storage device. In addition, there is an associated icon for this function located on the METOC Database Manager Window (Section 3.5).

Restore

This option retrieves data previously archived from the tape drive or other storage device and restores the data to the appropriate database. In addition, there is an associated icon for this function located on the METOC Database Manager Window (Section 3.6).

METOC DB Browser

This option allows the operator to view the contents of the databases (Section 3.11). The operator can also filter out unwanted data from the display by using the filter window (Section 3.10).

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Server Config

This option allows for the setup of the MDBMAN server (Section 3.7).

Exit

This option closes the MDBMAN client. This does not end the server processes.

3.2.2 Edit Menu

The **Edit** menu allows the operator to manipulate a preexisting purge.

Edit

The Edit option is not available on this release of MDBMAN.

View

This option will display the criteria concerning a selected Pending Operation. This will bring up the purge window with the criteria that the purge will affect. In addition, there is an associated icon for this function located on the METOC Database Manager Window (Section 3.2).

Delete

This option removes any operation in the Pending Operation field. This will delete any selected purges. In addition, there is an associated icon for this function located on the METOC Database Manager Window (Section 3.2).

3.2.3 Utilities Menu

The **Utilities** menu allows for the setup of the archiving device and the ability to view what manipulations have been performed to the databases.

Event Log

This option allows the operator to view a list of purge, archive, and restore events that have already been executed (Section 3.8).

Device Config

This option allows the operator to configure the type of device that is going to be used as the archiving media (Section 3.9).

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Update Connection

This option refreshes the connection to the MDBMAN server. This also updates the percentages of database usage.

Restart Server

This option resets the internal scheduler. Any events that are executing will be stopped, and any events that are scheduled for 'Now' will be deleted from the pending operation field. No other event previously scheduled will be affected.

3.2.4 Help Menu

Help

This option displays the help associated with the MDBMAN software package.

About

This option displays an "about" dialog box, which contains the following information about MDBMAN:

- METOC Database Manager
- METOC Database Manager Version Number
- Release Date

3.3 Pending Operation Field

The Pending Operation field displays the operations that are scheduled to be executed. The display shows the following information:

- Operation: Lists the type of manipulation that is scheduled to be executed.
- Freq: Lists how often the manipulation is going to be executed. This could be Once, Daily, Weekly, or Monthly.
- DB: Lists the database to be affected by the scheduled purge.
- Stat: Displays an 'R' when a scheduled event is executing.
- Next Run: Lists the next time the manipulation is scheduled to be executed.
- Last Run: Lists the last time the manipulation was executed.

When the operator adds a new operation, it will appear in this field. The field will refresh every minute that MDBMAN is running. The operator may also select the **Refresh**

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Pending Operations button located at the top of the Pending Operation field to refresh the field at any time.

The operator can delete or view a pending operation by selecting an item from the Pending Operation field. After the operator makes a selection, choose the appropriate option, either from the Edit Menu (Section 3.2.2), or the associated icon.

- The Edit option is not available with this release of MDBMAN.
- The View option displays the criteria of the scheduled operation in the corresponding window (e.g., for a purge on the Grid Field database, the purge criteria will be displayed in the Grid Field purge window (Section 3.5)).
- The Delete option removes an existing scheduled operation from the system.

3.4 Purge Window (common)

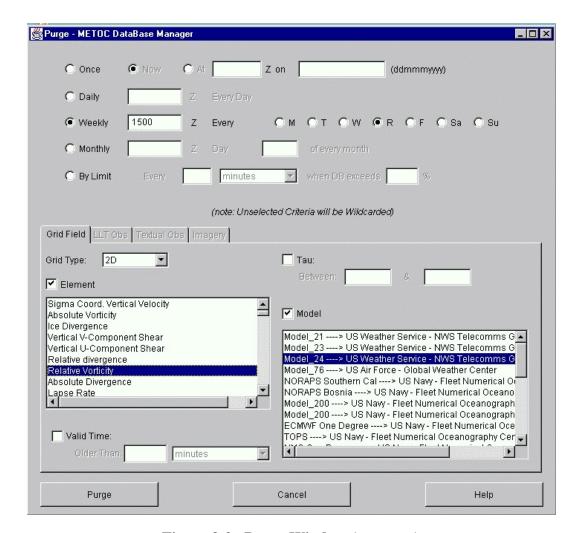


Figure 3-2. Purge Window (common)

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The Purge Window (Figure 3-2) can be accessed though the **File** menu (Section 3.2.1) or by selecting the Purge icon located on the METOC Database Manager Window. The Purge window allows the operator to set up the schedule and execute a purge at an appropriate time. The top area of the Purge window is identical for all four databases. The bottom area of the Purge window is unique for each of the supported databases. The options that are available for scheduling a purge are the following: Once, Daily, Weekly, Monthly, and By Limit.

- The Once option gives the ability to purge the selected database immediately (Now option). The At option gives the ability to schedule the purge to begin at a specified time on a specified date. To specify the time and date, the operator enters the desired purge time (Zulu) into the Time field located to the right of the At option. To specify the date, it must appear in the following format to be accepted by the software. The format is: ddmmmyyyy (e.g., 25JUN1998).
- The Daily option gives the user the ability to schedule a purge to begin at the same time every day. By selecting Daily, the operator will have to enter a specified time for this purge to start every day. The time is in Zulu. All Daily scheduled purges will be displayed in the pending operation field.
- The Weekly option gives the ability to select a particular day of the week and time of day at which to start the purge. This purge will execute every week on the specified day at the specified time. The operator must select a day and a time of day for the purge to be executed. All Weekly scheduled purges will be displayed in the pending operation field.
- The Monthly option gives the ability to schedule purges on a specified day of the month. This type of purge will execute every month on the specified date and at a specified time. If the date entered is a date that does not occur each month, the purge will be executed on the following day at the specified time (e.g., if the purge is scheduled for the 31st day of the month, and the month contains only 28 days, the purge will be scheduled and executed on the 1st of the following month).
- The By Limit option gives the operator the ability for MDBMAN to purge a specified database when the percentage full of the database reaches a desired amount. The operator controls how often MDBMAN should check to see if the purge needs to be executed. The operator also controls the percentage full for this particular type of purge.

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A scheduled purge will be executed even if MDBMAN client is not running.

3.4.1 Purge Window Grid Field (MDGRID)

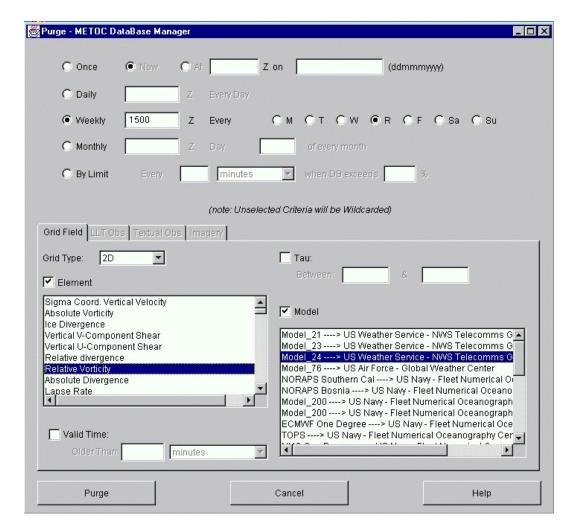


Figure 3-3. Purge Window (MDGRID)

To purge from the Grid Field database, the corresponding **Grid Field** button must be selected on the METOC Database Manager main window. The operator can then set the criteria for the purge by using the following fields: Grid Type, Tau, Valid Time, Model, and Element.

• Grid Type: Select either a 2D grid system or a 3D grid system. Select on the arrow to the right of the "Grid Type" field. This displays a dialog box that contains 2D and 3D. Select the appropriate grid type for the purge criteria.

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- Tau: If the purge criteria are to contain a Tau, select the check box to the left
 of the "Tau." The operator may now enter the beginning Tau and the ending
 Tau for the purge.
- Valid Time: To purge using the valid time option, select the check box to the
 left of "Valid Time." Then enter in the "Older Than" field and select the
 appropriate unit of time. In the "Older Than" field, enter the desired amount
 of time. Anything over the specified amount of time will be purged from the
 database.
- Model: To purge using the Model option, select the check box to the left of "Model," then select the appropriate model to be purged. By using the Model option, only one type of model can be purged at a time.
- Element: To purge using the Element option, select the check box to the left of "Element," then select the appropriate element to be purged. Only one element can be selected at a time.

The operator has the option to purge everything in the database by not entering any criteria and then selecting the **Purge** button. Once the correct criteria have been entered and the schedule of the purge has been set, select the **Purge** button located at the bottom of the screen. Selecting the **Purge** button executes the purge, depending on how the purge was scheduled. The purge could execute immediately, or it may have been scheduled for a later time. If the purge was scheduled for a later time, the purge will be displayed in the Pending Operation window (Section 3.3).

3.4.2 Purge Window LLT Obs (MDLLT)

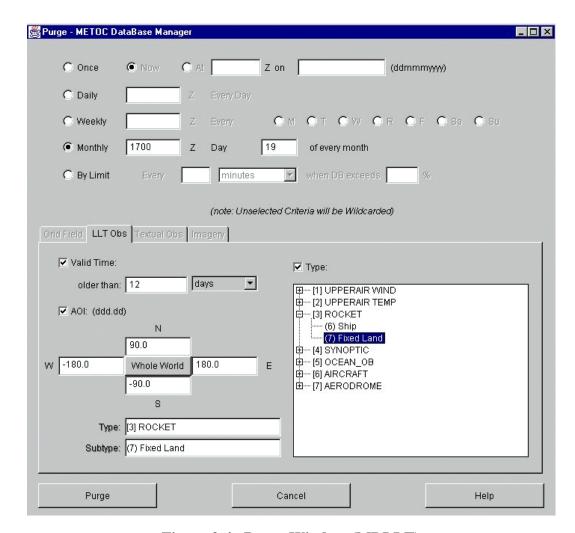


Figure 3-4. Purge Window (MDLLT)

To purge from the LLT Obs database, the corresponding **LLT Obs** button must be selected on the METOC Database Manager main window. The operator can then set the criteria for the purge by using the following fields: Valid Time, Area Of Interest (AOI), and Types.

- Valid Time: To purge using the valid time option, select the check box to the
 left of "Valid Time." Then enter in the "Older Than" field and select the
 appropriate unit of time. In the "Older Than" field, enter the amount of time.
 Anything over the specified amount of time will be purged from the selected
 database.
- AOI: To purge using AOI, select the check box to the left of "AOI." Then
 enter the coordinates to be purged. The accepted values in the North field

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range from 0 to +90 (degrees), and the values in the South field range from 0 to -90 (degrees). The accepted values in the East field range from 0 to +180 (degrees), and the values in the West field range from 0 to -180 (degrees). The information falling between the values that the operator entered will be purged from the database. These values must be entered in decimal format (e.g., -180.0).

• Types: To purge using observation types, select the check box to the left of "Types." This allows for the various observation types listed to be selectable. By selecting the desired observation, all of the subtypes that correspond to that particular observation are automatically selected. If a particular subtype is desired, select the '+' next to the corresponding type. This displays a list of corresponding subtypes. Lastly, select the subtype that is to be purged. The types and subtypes that have been selected are displayed in the LLT Obs Type field and LLT Obs Subtype field, respectively. After the '+' has been selected and the subtypes are displayed, a '-' appears next to the selected type. To make the subtypes not visible, select the '-' and the subtypes will no longer be displayed.

The operator has the option to purge everything in the database by not entering any criteria and then selecting the **Purge** button. After the correct criteria have been entered and the schedule of the purge has been set, select the **Purge** button located at the bottom of the screen. Selecting the **Purge** button executes the purge, depending on how the purge was scheduled. The purge could execute immediately, or it may have been scheduled for a later time. If the purge was scheduled for a later time, the purge will be displayed in the Pending Operation window (Section 3.3).

3.4.3 Purge Window Textual Obs (MDTXT)

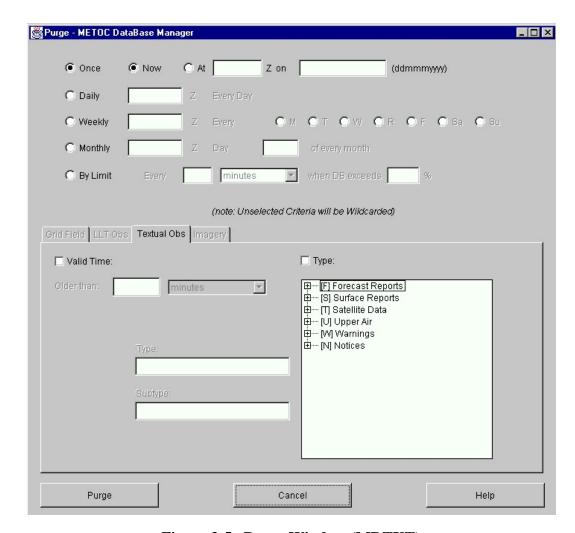


Figure 3-5. Purge Window (MDTXT)

To purge from the Textual Obs database, the corresponding **Textual Obs** button must be selected on the METOC Database Manager main window. The operator can then set the criteria for the purge by using the following fields: Valid Time and Types.

- Valid Time: To purge using the valid time option, select the check box to the
 left of "Valid Time." Then enter in the "Older Than" field and select the
 appropriate unit of time. In the "Older Than" field, enter the amount of time.
 Anything over the specified amount of time will be purged from the selected
 database.
- Types: To purge using Types, select the check box to the left of "Types." This allows for the various observation types listed to be selectable. By

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selecting the desired operation, all of the subtypes that correspond to that particular observation are automatically selected. If a particular subtype is desired, select the '+' next to the corresponding type. This displays a list of corresponding subtypes. Lastly, select the subtype that is to be purged. The types and subtypes that were selected are displayed in the Textual Obs Type field and Textual Obs Subtype field, respectively. After the '+' has been selected and the subtypes are displayed, a '–' appears next to the selected type. To make the subtypes not visible, select the '–' and the subtypes will no longer be displayed.

The operator has the option to purge everything in the database by not entering any criteria and then selecting the **Purge** button. After the correct criteria have been entered and the schedule of the purge has been set, select the **Purge** button located at the bottom of the screen. Selecting the **Purge** button executes the purge, depending on how the purge was scheduled. The purge could execute immediately, or it may have been scheduled for a later time. If the purge was scheduled for a later time, the purge will be displayed in the Pending Operation window (Section 3.3).

3.4.4 Purge Window Imagery (MDIMG)

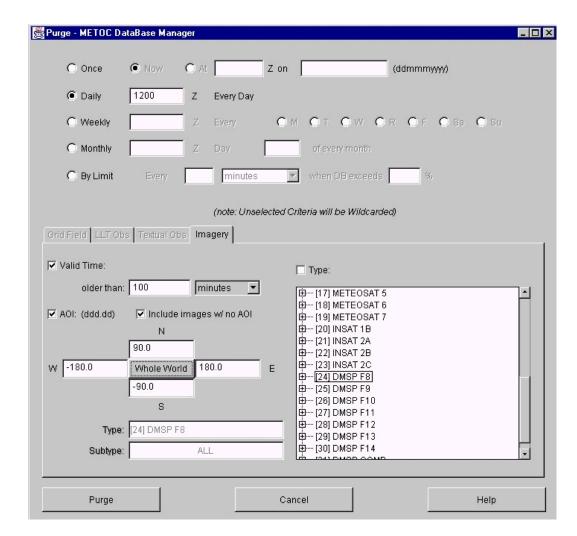


Figure 3-6. Purge Window (MDIMG)

To purge from the Imagery database, the corresponding **Imagery** button must be selected on the METOC Database Manager main window. The operator can then set the criteria for the purge by using the following fields: Valid Time, AOI, and Types.

- Valid Time: To purge using the valid time option, select the check box to the
 left of "Valid Time." Then enter in the "Older Than" field and select the
 appropriate unit of time. In the "Older Than" field, enter the amount of time.
 Anything over the specified amount of time will be purged from the selected
 database.
- Types: To purge using Types, select the check box to the left of "Types."
 This allows for the various image/product types listed to be selectable. By

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selecting the desired operation, all of the subtypes that correspond to that particular observation are automatically selected. If a particular subtype is desired, select the '+' next to the corresponding type. This displays a list of corresponding subtypes. Lastly, select the subtype that is to be purged. The types and subtypes that were selected are displayed in the Imagery Type field and Imagery Subtype field, respectively. After the '+' has been selected and the subtypes are displayed, a '-' appears next to the selected type. To make the subtypes not visible, select the '-' and the subtypes will no longer be displayed.

• AOI: To purge using AOI, select the check box to the left of "AOI." Then enter the coordinates to be purged. The accepted values in the North field range from 0 to +90 (degrees), and the values in the South field range from 0 to -90 (degrees). The accepted values in the East field range from 0 to +180 (degrees), and the values in the West field range from 0 to -180 (degrees). The information falling between the values that the operator entered will be purged from the database. These values must be entered in decimal format (e.g., -180.0). If the image desired does not have an AOI, select the check box next to the "Include Images with no AOI." This will add any images with no AOI into the purge.

The operator has the option to purge everything in the database by not entering any criteria and then selecting the **Purge** button. After the correct criteria have been entered and the schedule of the purge has been set, select the **Purge** button located at the bottom of the screen. Selecting the **Purge** button executes the purge, depending on how the purge was scheduled. The purge could execute immediately, or it may have been scheduled for a later time. If the purge was scheduled for a later time, the purge will be displayed in the Pending Operation window (Section 3.3).

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3.5 Archive Window

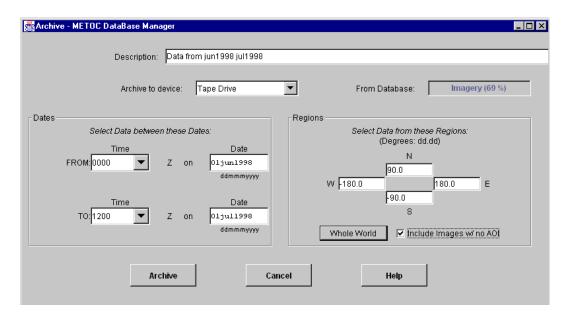


Figure 3-7. Archive Window

To archive data from one of the databases, select the desired database from the METOC Database Manager main window. Then select **Archive** from the **File** menu (Section 3.2.1) or select the associated Archive icon. After selecting **Archive** from either the **File** menu or the Archive icon, the Archive window is displayed (Figure 3-7). If this is the first time that archive is being executed, the archive device needs to be configured. To configure an archive device, see **Device Configuration** (Section 3.9) under the **Utilities** menu (Section 3.2.3). The following fields must be filled in to execute a successful archive: Archive to Device Field, Description Field, Dates Fields, and Regions Fields.

- Description field: To execute an archive, the operator must enter the archive name. Enter this name in the description field.
- Archive to device: This is where the operator selects the device to which the data will be archived. This supports a tape drive or a removable disk. To configure the software to a particular drive, use the Device Configuration option (Section 3.9) located in the **Utilities** menu (Section 3.2.3). After the devices are configured and the configurations have been saved, they will be listed in the "Archive to device" field. This list is displayed by selecting the arrow to the right of the "Archive to device" field.

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- Dates: The dates the operator enters identify the starting (From) and ending
 (To) times for the data to be archived. The time is in Zulu, and the date must
 follow the DDMMMYYYY format (e.g., 05Jun1999). The "From" field is
 where the start date is entered, and the "To" field is where the end date is
 entered.
- Regions: The operator can select a region by defining the latitude and longitude of a specific geographic area to be archived. The operator can also select the whole world by selecting the **Whole World** button in the bottom of the region window. If images with no AOI are to be archived, select the check box next to "Include Images with no AOI." The accepted values in the North field range from 0 to +90 (degrees), and the values in the South field range from 0 to -90 (degrees). The accepted values in the East field range from 0 to +180 (degrees), and the values in the West field range from 0 to -180 (degrees). These values must be entered in decimal format (e.g., -180.0).

After this information is entered, select the **Archive** button located at the bottom of the window. This will then prompt you with the number of items to be archived. If this is correct, select the **OK** button. By selecting this button, the operator executes the archive process immediately. If the destination of the archive is a directory on a hard drive, the permissions of that directory must be set. The system administrator must ensure that the desired groups have "write" permissions to the specified directory for the archive to be successful.

3.6 Restore Window

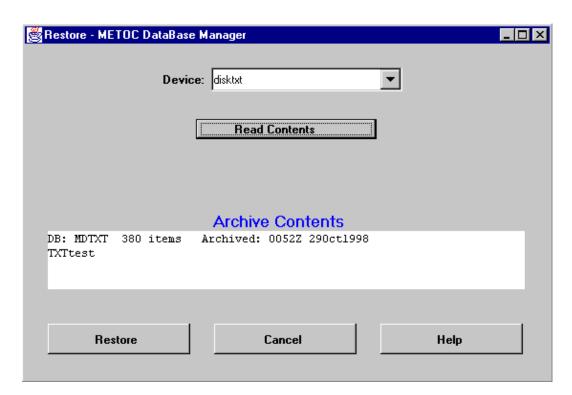


Figure 3-8. Restore Window

To Restore any archived data, select the **Restore** option under the **File** menu (Section 3.2.1), or select the associated icon for Restore. To restore the archived data, the operator must specify what type of device the archived data has been stored to. This information must be entered in the "Device" field. Once the location of the archived data is defined, select the **Read Contents** button located directly below the "Device" field. If any archived data is found, it will be displayed in the Archive Contents field located directly below the **Read Contents** button. The Archive Contents field displays the name that was assigned when the data was archived, the database from which the data was archived, and the time and date that the data was archived. Select the data to be restored from the list, and select the **Restore** button located below the list of archived data. The operator has the option to get a printout of the list of archived data by selecting the **Print** button located below the list of archived data.

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3.7 Server Configuration Window

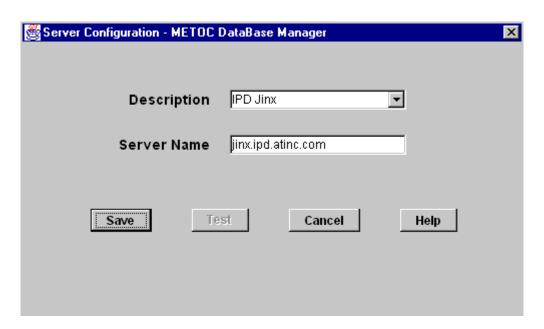


Figure 3-9. Server Configuration Window

To access the Server Configuration Window, select the File menu (Section 3.2.1), then select the Sever Config option. If this is the first time that MDBMAN is being executed on a particular computer, this is the first step that must be completed prior to connecting to the MDBMAN server. In the "Description" field, the operator enters/chooses a name that identifies the server configuration. The operator can enter a description for more than one server. This list is accessible using the pull down menu arrow located to the left of the "Description" field. In the "Server Name" field, the operator must enter the correct name/location of the server that the operator desires to make a connection to. An Internet Protocol (IP) address of the database server can also be entered in this field.

After data have been entered in both of these fields, the configuration is saved by selecting the **Save** button located at the bottom of the window. If the information entered into the window is incorrect and the operator wishes not to save the configuration, he/she must select the **Cancel** button located at the bottom of the window. This action will close the window, will not save any entries. This will also return the user to the METOC Database Manager main window.

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3.8 Event Log Window

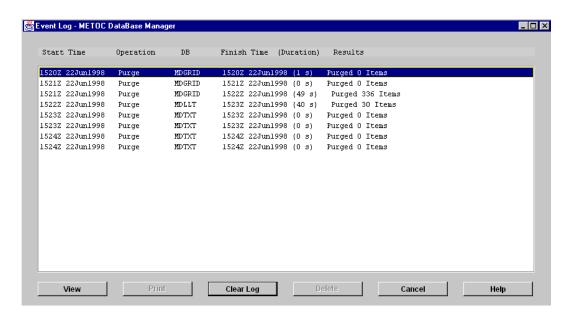


Figure 3-10. Event Log Window

The Event Log window is accessed by the **Utilities** menu (Section 3.2.3) by selecting the Event Log option under the menu. The Event Log window displays information identifying the operations and databases that they have been executed on. The following information is displayed in the Event Log window: Start Time, Operation, DB, Finish Time, Duration, and Results.

- Start Time: This column displays the information for when the operation was executed.
- Operation: Displays the type of operation that was executed.
- DB: Displays which database was manipulated during that particular operation.
- Finish Time: Displays the information for when the operation ended.
- Duration: Displays the amount of time required to execute the operation.
- Results: Displays a message describing what happened when that event was
 executed. The number of items manipulated is also displayed in this field. If
 an event was not successful, this message is displayed here.

In addition, the Event Log window allows the user to view the criteria of an already executed operation. To view the criteria of a particular event, select the event in the Event Log window, then select the **View** button located at the bottom

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of the window. This brings up a specific event window. If a purge was executed, it will bring up the Purge window that was used to create the operation.

The View option works like the View option associated with the **Edit** menu (Section 3.2.2) and the Pending Operation window (Section 3.4). The list that is contained in the Event Log window will not be deleted until operator intervention. When the operator chooses to remove all of the items contained in the Event Log, the operator selects the **Clear Log** button. This will remove all listings that populated the window. The Event Log window does not automatically refresh the data entries. To refresh the Event Log, the window must be closed and reopened. This will display new information in the window. The Print and Delete options are not supported by this release of MDBMAN.

3.9 Device Configuration Window

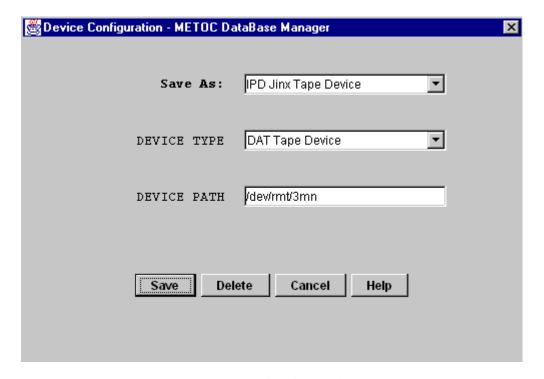


Figure 3-11. Device Configuration Window

To access the Device Configuration window, select the **Utilities** menu (Section 3.2.3), then select the **Device Config** option. To properly configure a device, the following fields must be entered correctly. They are: Save As, Device Type, and Device Path.

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- Save As: Enter a name for the configuration. This name will be accessible in the Archive window (Section 3.5).
- Device Type: From the list provided, select DAT Tape Device or Disk File.
 The DAT Tape Device is a removable media drive, and the Disk File is the
 location of a hard drive or a removable disk. If the DAT Tape Device is
 selected, do not use the no rewind flag.
- Device Path: Enter the path to either the DAT Tape Device or the directory that is the target location for the data. If a directory is specified, the operator must add a file name to the path. An example follows: /ARCHIVE/TEST/ARCH1.dat. This creates the file ARCH1.dat, which contains the archived data. The system administrator must ensure that the desired groups have "write" permissions on the directory for proper access.

After this information is entered, the operator may choose to save this configuration. Select the **Save** button located at the bottom of the window to save the configuration. To close the window without saving the changes to the Device Configuration window, select the **Cancel** button located at the bottom of the window.

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3.10 METOC DB Browser Filter Window

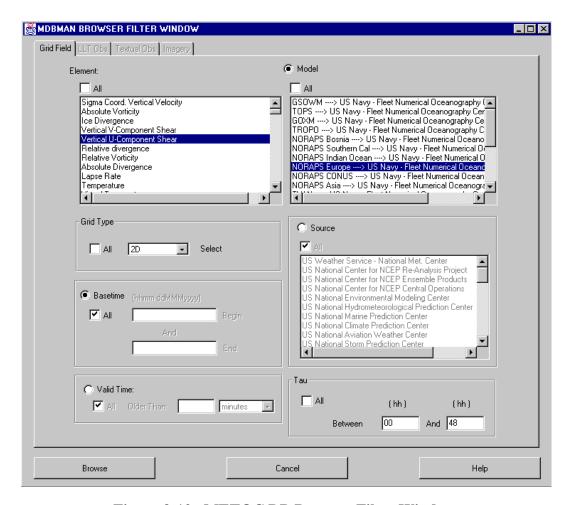


Figure 3-12. METOC DB Browser Filter Window

To access the METOC DB Browser Filter Window, select the **File** menu (Section 3.2.1), then select the **Browse** option. This will display the **Filter** window. The operator selects the desired database to be viewed and enters in the filter criteria. If the **Browse** button is selected before any filter criteria are entered, the entire database will be displayed in the Browser Display Window. All fields are set to "all" if nothing is selected. After the filter criteria have been entered, select the **Browse** button located at the bottom of the window.

3.10.1 Grid Field Filter Window

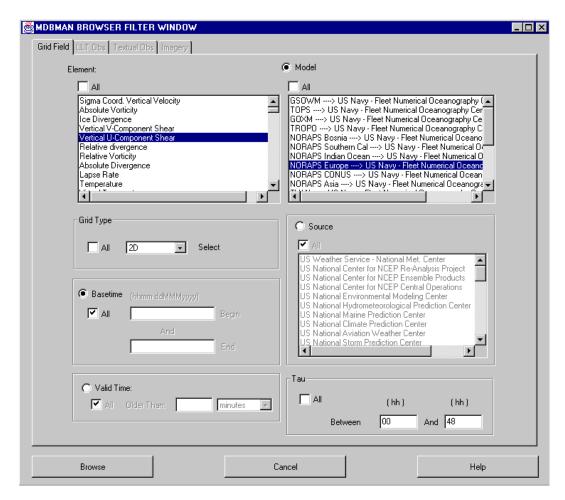


Figure 3-13. METOC DB Browser Grid Field Filter Window

To view the grid database, the corresponding grid field button must be selected on the METOC Database Manager Main window. The Grid Filter Window allows the operator to filter the query by using the following fields: Element, Model, Grid Type, Source, Base Time, Valid Time, and Tau.

- Element: Using the Element option to filter, select the check box to the left of "Element," then select the appropriate element to be filtered. Only one element can be selected at a time.
- Model: Using the Model option to filter, select the check box to the left of "Model," then select the appropriate model to be filtered. By using the Model option, only one type of model can be selected at a time. The operator must select between Model and Source; they both cannot be used at the same time.

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- Grid Type: Using the GridType option to filter, select the check box to the left of "All." Then select either a 2D grid system or a 3D grid system. Select on the arrow to the right of the "Grid Type" field. This displays a dialog box that contains 2D and 3D. Select the appropriate grid type for the filter criteria.
- Source: This is the location of where the grid was generated. To use the Source option, select the check box to the left of "Source." All is defaulted to; if all is not the desired filter criteria, then select the check box next to "All." This will remove the check from the check box. Then select the desired Source from the field on the right of "All." The operator must select between Model and Source; they both cannot be used at the same time.
- Base Time: To use Base Time in the filtering of data, select the check box next to "Base Time." Base time is the model run time associated with the creation of the grid field data. The format of the time must be the following: hhmm ddMMMyyyy (e.g., 1245 16SEP1998). The operator must select between base time and valid time; they both cannot be used at the same time.
- Valid Time: To Filter using the valid time option, select the check box to the
 left of "Valid Time." Then enter in the "Older Than" field and select the
 appropriate unit of time. In the "Older Than" field, enter the desired amount
 of time. The operator must select between Valid Time or Base Time; they
 both cannot be used at the same time.
- Tau: To filter using the Tau option, select the check box to the left of "Tau."
 Enter the beginning Tau and ending Tau of the filter.

3.10.2 LLT Filter Window

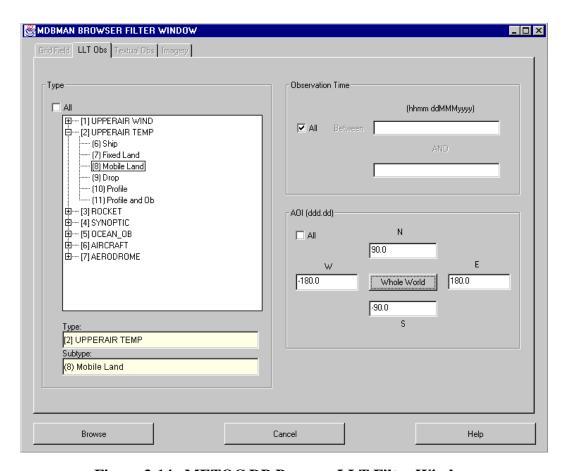


Figure 3-14. METOC DB Browser LLT Filter Window

To view the LLT Obs database, the corresponding LLT Obs button must be selected on the METOC Database Manager main window. The LLT Filter Window allows the operator to filter the query by using the following fields: Types, AOI, and Report Time.

• Type: To filter using observation types, select the check box to the left of "ALL." This allows for the various observation types to be selectable. By selecting the desired observation, all of the subtypes that correspond to that particular observation are automatically selected. If a particular subtype is desired, select the '+' next to the corresponding type. This displays a list of corresponding subtypes. Then select the subtype that is desired. The types and subtypes that have been selected are displayed in the Type field and Subtype field, respectively. After the '+' has been selected and the subtypes

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- are displayed, a '-' appears next to the selected type. To make the subtypes not visible, select the '-' and the subtypes will no longer be displayed.
- AREA: To filter using AREA, select the check box to the left of "ALL." Then enter the coordinates to be filtered. The accepted values in the North field range from 0 to +90 (degrees), and the values in the South field range from 0 to -90 (degrees). The accepted values in the East field range from 0 to +180 (degrees), and the values in the West field range from 0 to -180 (degrees). These values must be entered in decimal format (e.g., -180.0).
- Report Time: To filter using the Report Time option, select the check box to the left of "ALL." Then enter in the beginning Report Time and the ending Report Time. The report time must be entered in the following format: hhmm ddMMMyyyy (e.g., 1245 16SEP1998).

3.10.3 Textual Obs Filter Window

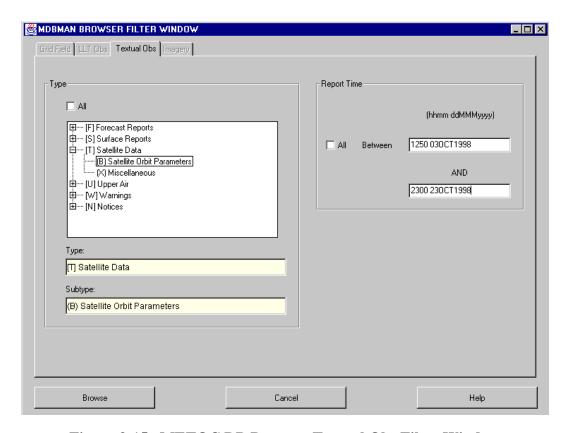


Figure 3-15. METOC DB Browser Textual Obs Filter Window

To view the Textual Obs database, the corresponding Textual Obs button must be selected on the METOC Database Manager main window. The Textual Obs Filter

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Window allows the operator to filter the query by using the following fields: Type and Report Time.

- Type: To filter using textual obs types, select the check box to the left of "ALL." This allows for the various textual obs types to be selectable. By selecting the desired observation, all of the subtypes that correspond to that particular observation are automatically selected. If a particular subtype is desired, select the '+' next to the corresponding type. This displays a list of corresponding subtypes. Then select the subtype that is desired. The types and subtypes that have been selected are displayed in the Type field and Subtype field, respectively. After the '+' has been selected and the subtypes are displayed, a '-' appears next to the selected type. To make the subtypes not visible, select the '-' and the subtypes will no longer be displayed.
- Report Time: To filter using Report Time option, select the check box to the left of "ALL." Then enter in the beginning Report Time and the ending Report Time. The report time must be entered in the following format: hhmm ddMMMyyyy (e.g., 1245 16SEP1998).

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3.10.4 Imagery Filter Window

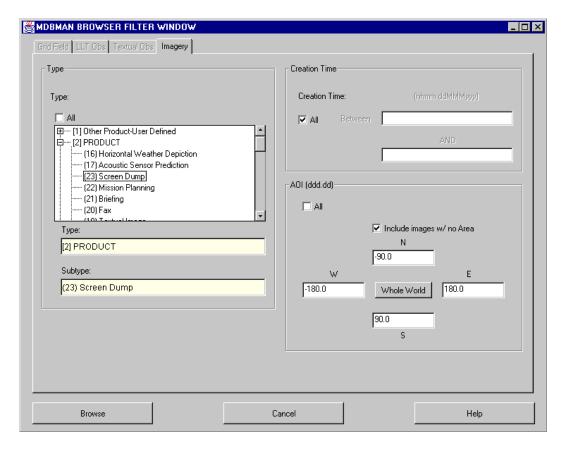


Figure 3-16. METOC DB Browser Imagery Filter Window

To view the Imagery database, the corresponding Imagery button must be selected on the METOC Database Manager main window. The Imagery Filter Window allows the operator to filter the query by using the following fields: Type, AOI, and Creation Time.

• Type: To filter using imagery/product types, select the check box to the left of "ALL." This allows for the various imagery/product types to be selectable. By selecting the desired imagery/product, all of the subtypes that correspond to that particular imagery/product are automatically selected. If a particular subtype is desired, select the '+' next to the corresponding type. This displays a list of corresponding subtypes. Then select the subtype that is desired. The types and subtypes that have been selected are displayed in the Type field and Subtype field, respectively. After the '+' has been selected and the subtypes are displayed, a '-' appears next to the selected type. To make the subtypes not visible, select the '-' and the subtypes will no longer be displayed.

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- AREA: To filter using AREA, select the check box to the left of "ALL." Then enter the coordinates to be filtered. The accepted values in the North field range from 0 to +90 (degrees), and the values in the South field range from 0 to -90 (degrees). The accepted values in the East field range from 0 to +180 (degrees), and the values in the West field range from 0 to -180 (degrees). These values must be entered in decimal format (e.g., -180.0). To filter images/products that have no AREA, simply select the check box to the left of "include images w/ no AREA."
- Creation Time: To filter using the Creation Time option, select the check box to the left of "ALL." Then enter in the beginning Creation Time and the ending Creation Time. The creation time must be entered in the following format: hhmm ddMMMyyyy (e.g., 1245 16SEP1998).

3.11 METOC DB Browser Display Window

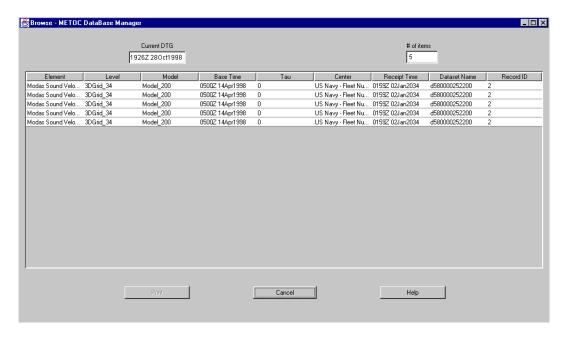


Figure 3-17. METOC DB Browser Display Window

To access the METOC DB Browser Display Window, select the **File** menu (Section 3.2.1), then select the **Browse** option. This will display the **Filter** window (Section 3.10). After entering in the filter criteria, select the **Browse** button. This will display the information matching the filter criteria in the display window. Once the Display window appears, data followed by "…" means that the

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operator can expand the column to view the rest of the data. Also, by selecting the name of the column, it will sort the list by that column. If the operator chooses, he/she can move the columns by selecting the title of the column and dragging the column to the desired location. This move is only good for the time the operator stays in this particular window. The print option is not supported in this release of MDBMAN.

3.11.1 Grid Field Display Window

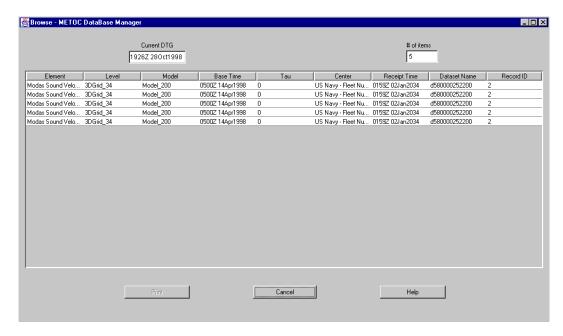


Figure 3-18. METOC DB Browser Grid Field Display Window

The Grid Display window allows the operator to view the following data from the grid database: Element, Level, Model, Base Time, Tau, Source, R time, Dataset Name, and Record ID.

- Element: The name of grid field weather parameter (e.g., Pressure).
- Level: The value of the vertical coordinate associated with the grid field element (e.g., 1000mb).
- Model: The name of the algorithmic model used to create the grid field dataset.
- Base Time: The model run time associated with the creation of the grid field data. Typically, 0z or 12z, given in DTG format (hhmm ddMmmyy), and relative to GMT.

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- Tau: Forecast Hour. The quantity of time between the valid time of a forecast and its associated base time. Given in hhmm format and relative to GMT.
- Source: The name for abbreviation of the originating site of the grid field data. Typically, the name of a METOC data production center (e.g., FNMOC).
- R time: Is the receipt time. The time when the grid field data are stored to the METOC database. It is given in DTG format (hhmm ddMmmyy) and relative to GMT.
- Dataset Name: The identifier of the relational table in the database associated with the set of grid field data elements for the same model. (Note: Intended for debug purposes.)
- Record ID: The database record identifier for an individual grid field data element. (Note: Intended for debug purposes.)

3.11.2 LLT Obs Display Window

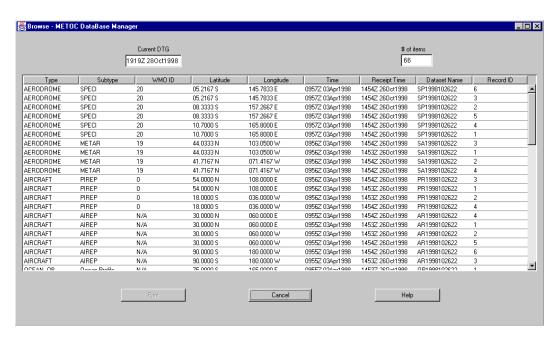


Figure 3-19. METOC DB Browser LLT Obs Display Window

The LLT Display window allows the operator to view the following data from the LLT database: Type, Subtype, WMO ID, Latitude, Longitude, Time, Dataset Name, and Record ID.

• Type: Type of LLT observation.

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- Subtype: Subtype of LLT observation.
- WMO ID: WMO code identifying the station within a particular area.
- Latitude: Location of the station relative to the Equator.
- Longitude: Location of the station relative to the Equator.
- Time: The time when the observation was created. Given in DTG format (hhmm ddMmmyyyy) and relative to GMT.
- Dataset Name: The identifier of the relational table in the database associated with the set of LLT Observation data elements for the same base time and model. The structure of the dataset name is type and subtype first, then the receipt time of the dataset (e.g., aa1998090113 (type, subtype, yyyymmddhh)). (Note: Intended for debug purposes.)
- Record ID: The database record identifier for an individual LLT Observation data element. (Note: Intended for debug purposes.)

3.11.3 Textual Obs Display Window

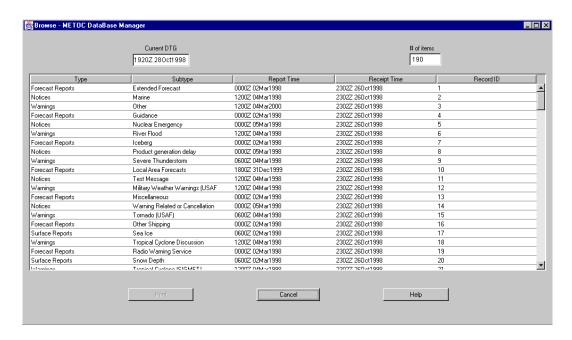


Figure 3-20. METOC DB Browser Textual Obs Display Window

The Textual Obs Display window allows the operator to view the following data from the Textual Obs database: Type, Subtype, Report Time, Receipt Time, and Record ID.

• Type: Type of Textual observation.

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- Subtype: Subtype of Textual observation.
- Report Time: The time when the Textual Observation was created. Given in DTG format (hhmm ddMmmyyyy) and relative to GMT.
- Receipt Time: The time when the Textual Observation data are stored to the METOC Database. Given in DTG format (hhmm ddMmmyyyy) and relative to GMT.
- Record ID: The database record identifier for an individual Textual Observation data element. (Note: Intended for debug purposes.)

3.11.4 Imagery Display Window

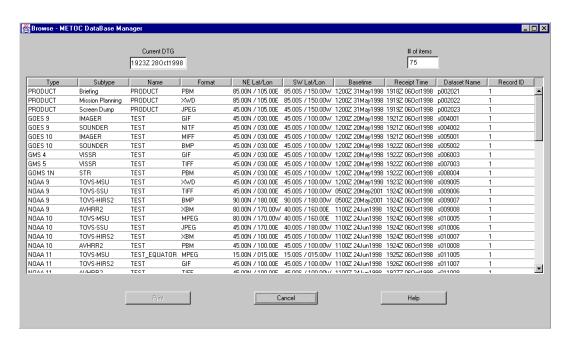


Figure 3-21. METOC DB Browser Imagery Display Window

The Imagery Display window allows the operator to view the following data from the Imagery database: Type, Subtype, Title, Format, NE Lat/Lon, SW Lat/Lon, Base Time, R time, Dataset Name, and Record ID.

- Type: Type of Image/Product.
- Subtype: Subtype of Image/Product within the Imagery Type category.
- Title: User-defined tag for the data.
- Format: Identifies what file format the image or product is, e.g., gif, jpeg, mpeg, tiff,
- NE Lat/Lon: The Northeast corner of the Image/Product.

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- SW Lat/Lon: The Southwest corner of the Image/Product.
- Base Time: The time when the image/product was created. Given in DTG format (hhmm ddMMMyyyy) and relative to GMT.
- R time: The receipt time. The time when the image/product data are stored to the METOC database. It is given in DTG format (hhmm ddMMMyyyy) and relative to GMT.
- Dataset Name: The identifier of the relational table in the database associated with the set of Images/Products data elements for the same base time and model. (Note: Intended for debug purposes.)
- Record ID: The database record identifier for an individual Imagery/Product data element. (Note: Intended for debug purposes.)

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Appendix A - ABBREVIATIONS/ACRONYMS

AESS Allied Environmental Support System

AOI Area Of Interest

API Application Program Interface

COE Common Operating Environment

DII Defense Information Infrastructure

GCCS Global Command and Control System

IC4ISR Integrated Command, Control, Communications, Computer, and

Intelligence Surveillance Reconnaissance

IMOSS Mobile Oceanographic Support System

IP Internet Protocol

JMCIS Joint Maritime Command Information System

JMS Joint METOC Segment

LLT Latitude-Longitude-Time

MACLIM Climatology Data API Segment of the TESS(NC) METOC

Database

MAGRID Grid Field API Segment of the TESS(NC) METOC Database

MAIMG Imagery API Segment of the TESS(NC) METOC Database

MALLT LLT Observation API Segment of the TESS(NC) METOC

Database

MAREM Remotely Sensed Data API Segment of the TESS(NC) METOC

Database

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MATXT Textual Observation API Segment of the TESS(NC) METOC

Database

MDBMAN METOC Database Manager

MDCLIM Climatology Data Database Segment of the TESS(NC) METOC

Database

MDGRID Grid Field Database Segment of the TESS(NC) METOC

Database

MDIMG Imagery Database Segment of the TESS(NC) METOC Database

MDLLT LLT Observation Database Segment of the TESS(NC) METOC

Database

MDREM Remotely Sensed Data Database Segment of the TESS(NC)

METOC Database

MDTXT Textual Observation Database Segment of the TESS(NC)

METOC Database

METOC Meteorology and Oceanography

MIDDS Meteorological Integrated Data Display System

NITES Navy Integrated Tactical Environmental Subsystem

SQL Structured Query Language

SUM Software User's Manual

TESS(NC) Tactical Environmental Support System Next Century

Z Zulu

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